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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,845	12/14/2001	David Klover	115426-0949	7445
29158 7590 07/31/2008 BELF., BOYD & LLOYD LLP P.O. BOX 1135 CHICAGO, IL 60690				
EXAMINER				
HOM, SHUCK C				
ART UNIT		PAPER NUMBER		
2616				
MAIL DATE		DELIVERY MODE		
07/31/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/016,845

**Applicant(s)**

KLOPER, DAVID

**Examiner**

SHICK C. HOM

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 7-11, 14-18, 21-25, 28-32, 35-39 and 42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-11, 14-18, 21-25, 28-32, 35-39 and 42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-4, 7-11, 14-18, 21-25, 28-32, 35-39, and 42 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 7-11, 14-18, 21-25, 28-32, 35-39, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi (6,289,202) in view of Kelly et al. (2003/0050015).

Kikuchi discloses the method in a radio frequency communications system that support two-way communication, the method comprising:

selecting a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme (the abstract recite selecting an optimal channel from a plurality of groups of channel according to the radio environment and intermodulation);

transmitting a message according to the selected transmission channel class over a channel; and selectively modifying the transmission channel class based upon characteristics of the channel (col. 9 lines 1-14 recite the base station changing the stored channel group based on the measurement message clearly anticipate modifying the channel class).

Kikuchi discloses all the subject matter of the claimed invention with the exception of the method being for ranging in a satellite; the transmitted message being a ranging message; altering the transmission channel class for load balancing; and receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel; including power and timing information.

Kelly et al. from the same or similar fields of endeavor teach that it is known to provide the method being for ranging in a satellite (the abstract recite the satellite system); the

transmitted message being a ranging message; altering the transmission channel class for load balancing, as in claims 7, 14, 21, 28, 35, 42 (paragraph 0075 recite ranging to adjust timing as needed for load balancing); and receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel; including power and timing information, as in claims 2, 9, 16, 23, 30, 37 (paragraph 0177 recites the step of ranging including measuring change to the satellite position and paragraph 0181 recite re-range to adjust the timing and power) as in claims 1, 3-4, 8, 10-11, 15, 17-18, 22, 24-25, 29, 31-32, 36, 38-39.

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the method being for ranging in a satellite; the transmitted message being a ranging message; altering the transmission channel class for load balancing; and receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel; including power and timing information as taught by Kelly et al. in the communications network of selecting a radio channel from a group of radio channels of Kikuchi.

The method being for ranging in a satellite; the transmitted message being a ranging message; altering the transmission channel class for load balancing; and receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel; including power and timing information can be implemented by providing the satellite communication system including signal measurement of Kelly et al. to method of selecting channel of Kikuchi. The motivation for providing the satellite communication system as taught by Kelly et al. to the method of selecting channel of Kikuchi being that it provides a communication system in which the channel selector can function as designed.

#### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grau et al. disclose channel quality management in a cable telephony system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHICK C.

HOM whose telephone number is (571)272-3173. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chi H Pham/  
Supervisory Patent  
Examiner, Art Unit 2616  
7/25/08

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